# Re-interpreting the minimal foot as a domain for lenition

Katalin Balogné Bérces

Pázmány Péter Catholic University, Hungary



bbkati@yahoo.com



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# Roadmap:

① Data from lenition sub-systems in varieties of English
⑤ lenition may be confined to the "minimal foot"
⑥ implicational relation among lenition systems such that lenition outside this minimal domain implies lenition within

# **②** A representational solution:

- (i) a CVCV skeleton
- (ii) two lateral relations: government (a destructive force) and licensing (supporting segmental expression of the target)
- (iii) stressed vowels distract the licensing charge of the following vowel
- (iv) long nuclei are VCV sequences exhibiting right-to-left V-to-V licensing

#### **①** The "Withgott effect"

- tapping/flapping: the 'classical' pattern: roughly, in intervocalic position whenever the second vowel is unstressed
- but: Withgott (1982): tap suppression in certain positions (for certain speakers):

flapped <u>t</u>	aspirated <u>t</u>
capi <u>t</u> alístic	mili <u>t</u> arístic
	sani <u>t</u> isátion
	mono <u>t</u> onícity

- cf. *capital* vs. *military, sanitize, monotone*: untapped  $\underline{t}$  in the derivative where there is untapped  $\underline{t}$  in the base due to stress on the syllable whose onset the  $\underline{t}$  is
- also found in morphologically simple *Mediterránean*, *Winnipesáukee*, *Navratilóva*, *abracadábra*, etc.: aspiration (instead of lenition)
- => <u>the problem of the third syllable in a dactyl</u>: foot-based solution: cyclic analysis: (capita)(listic) but (mili)(ta(ristic)) + adjunction of the stray syllable to the right: (abra)(ca(dabra)) etc. (Withgott 1982, Jensen 2000, Davis 2003, 2005<sup>1</sup>)
- N.B. only applicable to nonfinal dactyls

<sup>&</sup>lt;sup>1</sup> Expletive infixation data seem to support these footings, cf. *Winne-frickin-pesaukee* and *Winnepe-frickin-saukee*; *mili-fuckin'-taristic* and *milita-fuckin'-ristic*, but *capita-frickin-listic* and \**capi-frickin-talistic* (Davis 2003)

### ① The "competitive chain of reduction"

• Harris and Kaye (1990: 261): <u>t</u>-lenition in New York English (tapping) and London (glottalling): two successive potential lenition sites, e.g.

competitive:
compe[t]i[t]ive
compe[?]i[t]ive
compe[?]i[?]ive
*compe[t]i[?]ive

- the second can only reduce if the first reduces, too
- (parallel results obtained for tapping in NYC)
- [Harris and Kaye: "a 'chain' of reduction [...] along lines of government"]
- can be reinterpreted as **weak** vs. **semiweak**: stronger tendency to lenite in weak position (*compétitive*), semiweak (*compétitive*) is more resistant to reduction (terminology introduced for Dutch by van Oostendorp (2000: 147-148))
- the "Withgott effect" revisited: Steriade (2000: 322-326, endnote 4): tap suppression does not obtain in syllables that directly follow the tonic: *statistic statistician*

## **Interim conclusions**:

- the immediate post-tonic position is weak, the third syllable in a dactyl is semiweak
- there is a "minimal domain" for lenition (comprising the foothead and the weak position): lenition outside that domain implies lenition within
- weak = recessive position within this domain; semiweak = recessive position outside this domain

#### ① The problems with "unfooted" syllables (Balogné Bérces 2011a)

- *abra<u>ca</u>dabra*, *<u>po</u>tato, <i>competi<u>tive</u>*: adjunction of stray syllable to the right or left? there is no uniform direction for adjunction
- degenerate (unary/subminimal) feet? Headless/unstressed feet? Remain unfooted (immediately dominated by higher projection)? all of these raise theoretical questions
- plus: further asymmetries in pretonic unstressed position: <u>initially</u>: C is strong: *potáto* (strong aspiration)

V is weak: *políce, suppóse*: pre-tonic syncope is possible; may even lexicalize: *pram* (from *perámbulator*), *s'pose, praps* 

<u>medially</u>: C is semiweak: *mìlitarístic*, *Nàvratilóva*, *abracadabra*, etc. ("Withgott-effect")

V is semiweak: affected by reduction to a lesser extent: *Tatamagouchi* (Burzio 1994) + pre-stress syncope is blocked/restricted: *milit'ristic? nation'lize*? (lexicalized examples?)

	initial	medial
consonant	stronger: <u>potáto</u> , <u>políce</u>	weaker: <i>capi<u>t</u>alistic/mili<u>t</u>aristic</i> (cf. <i>be<u>tt</u>er)</i>
vowel	weaker: <i>p<u>o</u>táto, p<u>o</u>líce</i>	stronger: ?milit'ristic/nation'lize, Tatamagouchi
	(+ pram, s'pose, praps)	

# **①** Splitting 'intervocalic' into post-short and post-long<sup>2</sup>

phonological patterns which:

- involve segmental changes which are clearly of the 'lenition' type, and
- occur in an intervocalic environment, but only if the preceding vowel is short
- the ultimate finding: the "minimal domain" of lenition is even smaller

The phenomena all derive from once-active synchronic lenitions. These lenitions are not all still clearly synchronically active, but, if not, the diachrony is clear and the split intervocalic patterning is indubitable.

 $<sup>^{2}</sup>$  This section is based on joint work with **Patrick Honeybone**. For more discussion and more examples of the post-short/post-long distinction, incl. data for spirantization and from dialects of German, see Balogné Bérces – Honeybone (to appear).

#### Example 1: Northern English T-to-R

(see, for example, Wells 1982, Broadbent 2008, etc.)

- occurs in dialects from the Midlands to the North of England
- affects only words with /t/, deriving the typical rhotic of the variety
- affects mostly only word-final occurrences of /t/
- Wells (1982: 370):  $t \rightarrow r / [short V] \_\# V$  i.e. only after short vowels
- it is *very* lexically restricted: most common in only *it, not, what, but, let, get/got, at, that*; it is possible but less common in *fit, cut, hit* (and a handful of others)

[∫ʊtdaʊn]	shut down	[մուշՄ]	shut up
[gɛtdaʊn]	get down	[gɛ.mf]	get off

However, its parent process (cf. nineteenth-century descriptions (Ellis 1889 and Wright 1892) in Broadbent 2008): a productive, non-lexically-specific phonological process which:

- occurs intervocalically
- but only if the preceding vowel is short: long/complex nuclei block it

### Example 2: Lenisisation in Scouse diddification (Honeybone 2010)

- found in the dialect of English spoken in Liverpool (aka 'Scouse')
- templatic truncation which produces hypocoristics
- productive
- only the first consonant of the base is preserved in the diddified form; if it is a fricative, lenisisation can kick in: e.g.,  $/s/ \rightarrow [z]$

	best friend	<u>bes</u> tfrend	bezi
i	mustard	<u>mʊs</u> təd	mozi
	Leece street	<u>li:s</u> stri: <u>θ</u>	li:si
1	ice cream	<u>aıs</u> kxri:m	aısi

Lenisisation:

- occurs intervocalically
- but only if the preceding vowel is short: long/complex nuclei block it

## Example 3: New Zealand English tapping/flapping (Bye & de Lacy 2008: 98)

- NZE Basilect (informal/"broad") tapping follows the 'classical' pattern
- NZE Acrolect (formal/"cultivated"):

a. Flapping af	a. Flapping after a short stressed vowel and before a vowel				
[hǽrə]	'hatter'	[kæri]	'catty'		
[erṡpeɪ.]	'regatta'	[tʰ̀æ̀rəməgút∫i	] 'Tatamagouchee'		
b. No flapping	b. No flapping after a stressed long vowel or stressed diphthong				
[báːtə]	'barter'	[míːtə]	'metre'		
[kəmpjúːtə]	'computer'	[.iáɪtə]	'writer'		
[páʊtə]	'pouter'				
c. No flapping	c. No flapping after unstressed vowels				
[hɔ́spətəl]	'hospital'	[tʰɛ́.ɪətən]	'Terreton'		

In its lexical instantiation, NZE Acrolect tapping occurs:

- only foot-internally
- and only if the preceding vowel is short: long/complex nuclei block it

From a purely descriptive point of view:

• classical <u>lenition taxonomies may need to be amended</u> to include subtypes of the "weak(er)" phonological position in stress-sensitive lenition systems, along at least two dimensions:

### (i) **distance from the foothead**;

### (ii) length of the preceding vowel.

This is justified by dialectal/register differences in varieties of English:

in certain systems *city* but not *vanity*, *latter* but not *later* will lenite

(cf. Balogné Bérces 2008, 2011a-b)

Upon closer inspection:

- (i) and (ii) are related and collapsible: lenition may be confined to the "minimal foot" (the bimoraic minimal string reminiscent from minimal word phenomena)
- implicational relation among lenition systems: lenition outside this minimal domain implies lenition within → smaller/no variability is expected within this domain; the parametric variation outside this domain is due to more/less strict positional faithfulness / lenition inhibition (Balogné Bérces 2011b)

## **②** A representational solution

(i) a CVCV skeleton (Lowenstamm 1996 etc.)

(ii) two lateral relations: government (a destructive force) and licensing (supporting segmental expression of the target) (Ségéral and Scheer 1999 etc.)

Further assumptions:

(i) stressed vowels distract the licensing charge of the following vowel (Balogné Bérces 2008)

- (ii) long nuclei are VCV sequences exhibiting right-to-left V-to-V licensing (e.g., Szigetvári 1999: 72)
- ✤ properly derives a ternary distinction between
  - licensed position (phonologically strong),
  - governed position (within the "bimoraic minimum"), and
  - licensed-governed position (a weak position outside the "minimal foot" domain).

#### **②** A representational solution



System A: all governed C's (= weak and semiweak positions) lenite

System B: governed C's (= weak position) lenite; in licensed-governed C's (= semiweak position) lenition is inhibited

(\* System C, etc.)

#### **②** A representational solution





System A: all governed C's (= weak and semiweak positions) lenite

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(\* System C, etc.)

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